

TOSHIBA

INSTRUCTION MANUAL

To ensure that you use the Toshiba PDR-T10 Digital Still Camera safely and correctly, read this Instruction Manual carefully before you start using the camera. Once you have finished reading this Instruction Manual, keep it handy at all times.

DIGITAL STILL CAMERA

PDR-T10

In the space provided below, please record the model and Serial No. of your camera.

Model No. PDR-T10 Serial No. _____

Please retain this information for future reference.

Attention

For customers in the U.S.A.

DIGITAL STILL CAMERA PDR-T10



Tested To Comply
With FCC Standards

FOR HOME OR OFFICE USE

FCC Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

NOTE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Change the direction of the radio or TV antenna.
Move the equipment or the radio or TV. For example, if the equipment is to the right of the TV, move it to the left of the TV.
Or, move the equipment farther away from the radio or TV.
- Plug the equipment into a different outlet. Don't plug your radio or TV into the same circuit as your equipment.
- Ensure that all expansion slots (on the back or side of the equipment) are covered. Also, ensure that all metal retaining brackets are tightly attached to the equipment.
- If these suggestions don't help, consult your equipment dealer or experienced radio/TV technician for help.

Getting Ready

Basic
Photography

Playing/
Erasing Images

Connecting to
the PC

Other
Applications

Additional
Information

Attention (continued)

Getting Ready

CAUTION

If you modify the camera in any way, without getting approval from Toshiba Corporation, your camera may violate FCC regulations. Violation of FCC regulations may cause the FCC to void your right to use the modified camera.

TOSHIBA AMERICA INFORMATION SYSTEMS, INC.

Imaging Systems Division
9740 Irvine Boulevard,
Irvine, California 92618-1697
Phone Number: (800)288-1354

Basic
Photography

For customers in Canada

CAUTION

This Class B digital apparatus complies with Canadian ICES-003.

Playing/
Erasing Images

Connecting to
the PC

Other
Applications

Additional
Information

Before Reading This Manual

Thank you for purchasing the Toshiba PDR-T10 Digital Still Camera.

To ensure that you use this camera safely and correctly, read this Instruction Manual carefully before you start using the camera. Once you have finished reading this Instruction Manual, keep it handy at all times.

Every effort has been made in assuring the quality of this product, however if for any reason the product has been damaged during production, it will be replaced free of charge. For all other non conformities or damages other than the above, Toshiba corporation will not be held liable whatsoever.

The Design, Specifications, Software and Contents of instruction Manual are subject to change without prior notice for improvement.

TRADEMARK INFORMATION

- MS-DOS, Windows, Windows 98, Windows 2000, Windows Me and Windows XP are registered trademarks of the Microsoft Corporation of the U.S. registered in the USA and other countries.

Windows is an abbreviated term referring to the Microsoft Windows Operating System.

- Macintosh is a registered trademark of Apple Computer, Inc.
- SD™ is a trademark.
- Image Expert is a registered trademark of Sierra Imaging, Inc.
- Other companies or product names are trademarks or registered trademarks of the respective companies.



NOTES ON COPYRIGHT

Images taken with digital still cameras are for personal enjoyment only and should not be used, indicated, distributed or exhibited, etc. otherwise without the permission of the copyright holder as per copyright laws.

Note that photographing some performances, exhibitions, etc., is restricted, even when photographs are taken for personal enjoyment. In addition, the transfer of memory cards (SD memory cards, etc.) containing copyrighted images and files is limited to purposes within the range permitted by copyright laws.

ABBREVIATIONS USED IN THIS MANUAL

Windows 98

This refers to the Microsoft® Windows® 98 operating system.

Windows 2000

This refers to the Microsoft® Windows® 2000 operating system.

Windows Me

This refers to the Microsoft® Windows® Me operating system.

Windows XP

This refers to the Microsoft® Windows® XP operating system.

Notes on Software

This Instruction Manual describes how to install the supplied software and a brief explanation of how to use the Software Application. See the help file of Software Application for detailed explanation.

This manual has been written assuming that you basically understand how to use your personal computer. For basic details on your personal computer, refer to the Instruction Manual of your personal computer or the operating system.

Notes on the Supplied Software

The supplied CD-ROM includes the following software applications.

- Image viewing software "Image Expert"

This program allows you to view images you have taken with the camera on a computer and also to process and modify them. For detailed operating instructions, refer to the help file.

☞ Installing the Image Viewing Software ⇨ page 42.

- USB driver (for Windows 98 only)

Install this to connect the camera to a computer using the supplied USB cable. This driver is exclusively used for Windows 98. If you use a Macintosh computer or Windows 2000, Me or XP, use the standard driver for that operating system.

☞ Installing the USB driver ⇨ page 43.

- Service and Support file

This includes information on service and support. We recommend storing this file into your computer in case you lose this manual.

☞ Global Contacts ⇨ page 56.

- Software version upgrade

For better use, the firmware of the camera may be upgraded after shipment. The methods of version upgrade are available in our website.

☞ Global Contacts ⇨ page 56.




Notes on Software and Instruction Manual

- Copying or duplication of the software and Instruction Manual packaged with this Software Application in part or in whole is not allowed without the prior permission of Toshiba Corporation.
- Use of the software and Instruction Manual packaged with this Software Application is allowed only on one personal computer.
- Toshiba Corporation is not liable whatsoever for any damages to the user or a third party as a result of use of a device by the software and Instruction Manual packaged with this Software Application.
- The personal computer screens shown in this Instruction Manual are examples, and may differ from actual screens. Toshiba Corporation is not liable whatsoever for any compensation arising from errors in descriptions in this Instruction Manual.

Safety Precautions

Read these safety precautions carefully before using the PDR-T10. These instructions contain valuable information on safe and proper use that will prevent harm and damage to the operator and other persons. Make sure that you fully understand the following details (indications) before proceeding to the main descriptions in this manual.



Indication Definitions and Graphic Symbol Definitions

Indication	Meaning
 DANGER	This indicates the existence of an imminent hazard that death or catastrophic bodily injury*1 may result from improper use.
 WARNING	This indicates the existence of a hazard that death or catastrophic bodily injury*1 may result from improper use.
 CAUTION	This indicates the existence of a hazard that bodily injury*2 or property damage*3 may result from improper use.

*1 "Catastrophic bodily injury" means loss of eyesight, burns (high and low temperature), shock, fracture, poisoning, etc. which leaves a sequela and require hospitalization or prolonged treatment.

*2 "Bodily injury" means injuries, burns, and shock which does not require hospitalization or prolonged treatment.

*3 "Property damage" means extended harm to home, household effects, domesticated animals, and pets.

Graphic symbol	Meaning
	Indicates a prohibited action that must not be carried out. The actual prohibited action is indicated in the symbol or nearby graphically or described in text.
	Indicates a necessary action that must be carried out. The actual necessary action is indicated in the symbol or nearby graphically or described in text.

Exemption Clauses

- Toshiba Corporation bears no responsibility for any damages or losses arising from earthquakes, fire or any other act of God, acts by third parties, misuse by the user or use under extreme operating conditions.
- Toshiba Corporation bears no responsibility for incidental damages (lost profit, suspension of business activities, corruption or loss of the memory contents, etc.) arising from the use of or the inability to use this unit.
- Toshiba Corporation accepts no liability whatsoever for any damages arising from the incorrect use not in compliance with instructions in this instruction manual.
- Toshiba Corporation accepts no liability whatsoever for any damages arising from malfunctions arising from combination with equipment or software that is not related to Toshiba Corporation.
- Toshiba Corporation accepts no liability whatsoever for any damages arising from repair or modifications made by the user or cause to be made by the user and carried out by an unauthorized third party.
- Notwithstanding the foregoing, Toshiba's liabilities shall not, in any circumstances, exceed the purchase price of the product.

Safety Precautions (continued)

Getting Ready

DANGER

Do not heat, disassemble or throw the batteries into fire or water.



Doing this might cause it to rupture, ignite or heat up, resulting in fire or major injury.

Basic Photography

Do not strike the batteries with a hammer, or step on, drop, or subject the battery to strong impact.



Doing so might cause it to rupture, ignite or heat up, resulting in fire or major injury.

Playing/
Erasing Images

WARNING

Should you ever notice smoke, a strange odor or excessive heat coming from the camera, immediately turn OFF the power and remove the batteries and AC adapter.



Continued use in this state might cause fire, electric shock or burns. For details on repair, consult the store of purchase, or please contact the technical support number.

Connecting to
the PC

Other
Applications

WARNING

If foreign objects or water have entered the camera, immediately turn the power OFF and remove the batteries and AC adapter.



Continued use in this state might cause fire or electric shock. For details on repair, consult the store of purchase, or please contact the technical support number.

If the camera has fallen or its case is damaged, immediately turn the power OFF and remove the batteries and AC adapter.



Continued use in this state might cause fire or electric shock. For details on repair, consult the store of purchase, or please contact the technical support number.

Do not use in areas near water.



This might cause fire or electric shock. Take special care during rain, snow, on the beach or near the shore.

Do not use the camera in the bath or shower.



This might cause a fire or electric shock.

Do not place the camera on inclined or unstable surfaces.



This might cause the camera to fall or tilt over.

Additional
Information

Safety Precautions (continued)

WARNING

Do not allow metallic objects or other flammable foreign matter inside the camera.



This might cause a fire or electric shock. Do not insert and store foreign objects in the battery compartment, terminal, other holes or openings.

Do not disassemble, change or repair the camera.



This might cause fire or electric shock. For details on repair and internal inspection, consult the store of purchase, or please contact the technical support number.

Do not touch power cords during a thunderstorm.



This might cause electric shock.

Do not use the camera while you are walking, driving or riding a motorcycle.



This might cause you to fall over or result in a traffic accident.

Use only the specified batteries or the specified AC adapter.



Use of a battery or AC adapter other than specified, might cause fire, defects or malfunctions.

WARNING

Keep the batteries out of the reach of children.



If a child swallows a battery, this might result in poisoning. If a child swallows a battery, immediately consult a physician.

If battery fluid enters the eyes, immediately rinse with fresh water and consult a physician to receive treatment.



If left untreated, damage to the eye could be permanent.

Use power supply that applies to the rating indicated on the AC cord.



Use of power supply other than the rating indicated on the AC cord might cause fire or electric shock.

CAUTION

If you want to use the camera in an airplane, consult with the airline and follow their instructions.



Use of this camera is sometimes restricted due to potential radio interference.

Do not use the camera in humid, steamy, smoky or dusty places.



This might cause fire or electric shock.

Safety Precautions (continued)

Getting Ready

CAUTION

Do not leave the camera in places where the temperature may rise significantly, such as inside a car.



This might adversely affect the case or the parts inside, resulting in fire.

Basic
Photography

Do not place or wrap the camera in cloth or blankets.



This might cause heat to build up and deform the case, resulting in fire. Use the camera in a well-ventilated place.

Playing/
Erasing Images

Before you move the camera, disconnect cords and cables.



Failure to do this might damage cords and cables, resulting in fire or electric shock.

Connecting to
the PC

Do not drop or subject the camera to strong impact.



This might cause fire, electric shock or malfunctions.

Other
Applications

Before you carry out maintenance on the camera, remove the batteries and AC adapter.



Leaving these attached might cause electric shock.

Additional
Information

Remove the batteries and AC adapter if you plan not to use the camera for a long time.



This might cause fire.

CAUTION

Insert the batteries paying careful attention to the polarity (+ or -) of the terminals.



Inserting the batteries with polarities inverted might cause fire and injury, or damage the surrounding areas.

Do not fire the flash near the eyes.



This might cause temporary damage to the eyesight.

Do not walk around with the camera swinging from the strap.



The camera might come into contact to other people and cause injury or damage to the camera or other objects.

Before you store or dispose the used batteries, tape the (+) and (-) terminals with insulating tape.



If stored or disposed without doing this, the batteries may make contact with metal objects, resulting in fire or injury due to leaking of battery fluid, overheating or bursting of the battery.

Safety Precautions (continued)

CAUTION

Do not subject the LCD monitor to impact.

If the LCD monitor is impacted, the glass on the screen may be broken and internal fluid may leak. If the internal fluid enters your eyes or comes into contact with your body or clothes, immediately rinse with fresh water. If the internal fluid enters your eyes, immediately consult a physician to receive treatment.



Consult your dealer regarding the internal cleaning of the camera once every two years.

If dust is allowed to accumulate inside the camera for a long time, this might result in fire or defects. Consult your dealer regarding the cleaning costs.



When changing batteries, replace both with new batteries.

Failure to do this might cause them to rupture, ignite or heat up, resulting in fire, major injury or damaging the camera.

"New batteries" refers either to recently purchased, never used Nickel or Lithium batteries, those within the expiry date of recommended use, or to Nickel Metal Hydrogen (NiMH) or Nickel Cadmium batteries that have recently been charged simultaneously.



CAUTION

Do not use different types of batteries together, or mix old and new batteries.

Doing so might cause them to rupture, ignite or heat up, resulting in fire, major injury or damaging the camera.



Do not remove batteries immediately after using the camera for a long period of time.

The batteries are heated up, they might resulting in fire injury.



Do not leave dead or exhausted batteries in the camera.

Neglecting the above may cause the battery to rupture, ignite or heat up, resulting in fire, major injury or damaging the camera.



Do not play the supplied CD-ROM with a regular CD player.

This might damage the headphone or speaker and may injure your ears.



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Notes On Handling Your Camera

When you use your camera, carefully read and strictly observe the Safety Precautions from page 5 onwards and the notes described below.

Avoid using or storing the camera in the following places:

- Places subject to humidity, dust and dirt
- Places subject to direct sunlight
- Places subject to high or low temperature
- Places filled with highly flammable gas
- Places near gasoline, benzene or paint thinner
- Places subject to strong vibrations
- Places subject to smoke or steam
- Places subject to strong magnetic fields (such as electric motors, transformers or magnets)
- Places contacting chemicals such as pesticides or next to rubber or vinyl products for long periods

Do not expose the camera to sand or dust.

- The PDR-T10 is particularly sensitive to sand and dust. If the camera comes into contact with sand or dust, not only will the camera become damaged, it will also no longer be repairable.
Pay special attention when using the camera at the beach or where sand or dust is likely to be present.

Notes On Condensation

- Due to a sudden change in temperature, such as when you move the camera from a cold location to a warm one, water droplets (condensation) may form on the inside of the camera or on the lens. When this occurs, switch the camera OFF, and wait an hour before using the camera. Condensation may also form on the SD card. If this happens, remove the SD card, wipe off any condensation and wait a short time before using it again.

Carrying out Maintenance on your camera

- To prevent the lens, surface of the LCD monitor from being scratched, blow off any dust from these parts with a blower brush and lightly wipe with a soft dry cloth.
- Clean the body of the camera with a soft dry cloth. Do not use volatile liquids such as paint thinner, benzene or insecticide, as these may react with the camera body and cause deformation or remove the coating.

Do not place credit cards nearby.

- A magnet is used on the front side of the camera. Be careful not to place magnetic card such as credit cards or the like nearby. Doing so may damage (erase) the data.

Notes on Batteries

Batteries

To extend the use of the camera, we strongly recommend that you only use the following types of batteries:

- AA Nickel battery (not rechargeable): ZR6G (Toshiba “GigaEnergy”)
- AA Nickel Metal Hydride (NiMH) battery (Rechargeable) : TH-3 (Toshiba)
The camera does not have a rechargeable function. Please use the battery charger on the market when recharging Nickel Hydride (NiMH) battery.
- AA Lithium battery (Not Rechargeable)
- CR-V3 Lithium battery pack (Not Rechargeable)

Use Toshiba “GigaEnergy” AA Nickel batteries.

“GigaEnergy” batteries are next generation batteries which are optimum for use in digital still cameras. They offer far better performance than conventional Alkaline batteries.

Notes on batteries other than the recommended batteries

AA Manganese batteries cannot be used in this camera.

The AA Alkaline batteries can be used in case of urgent need, but only a few photographs can be taken. Furthermore, they cannot be used in a low temperature.

Please be careful to purchase the proper batteries.

For consideration of the environment, we do not recommend the use of AA Nickel Cadmium batteries.

Note on Battery Life

The battery life may vary depending on individual brand of the battery, length of storage since manufacture, temperature of the camera and batteries, and operating condition such as flash. Moreover, if the polarities of the batteries (+ or –) and the terminal of the camera that come in contact with the electrodes are contaminated, electricity will not flow properly and the camera will decide that the batteries are exhausted. When removing and loading the batteries, be careful not to touch these parts. If the parts are contaminated, clean with a dry cloth.

When using the supplied Nickel batteries, the number of photographs that can be taken are shown as below.

Conditions: 25°C, Flash use rate 100%

Photography interval: 1 frame every 30 seconds

Possible number of shots: 70 shots

* The number of frames shown above is a reference value.

Method of Extending Battery Life

Even if the camera is turned off, the battery power is slightly consumed. We strongly recommend to remove the batteries when the camera is not in use for an extended period of time. However, the time and date settings will return to the initial settings, so reset them before using. Low temperatures can also affect the performance of the battery so keep the camera and battery warm by placing in clothes to protect against the cold. Furthermore, battery performance affected by low temperature, which cause the possible number of shots decreasing, restores its functions when batteries return to the adequate temperature (25°C).

Notes on Handling the AC Adapter

Be sure to use only the specified AC adapter (sold separately). Using a different AC adapter might cause the camera to malfunction.

When you use the AC adapter, carefully read and strictly observe the Safety Precautions from page 5 onwards and the notes described below.

- Use the AC adapter with the rating of the country/region where the camera is used. Be sure that you do not allow the AC adapter to contact any other metal object as this might cause a short circuit.
- To connect the AC adapter, firmly insert the plug on the end of the cable into the DC IN 5V terminal. Do not insert the plug into other terminals. This might cause the camera to malfunction.
- Before you disconnect the connector cable, turn the camera OFF and then disconnect the cable holding it by its plug. Do not disconnect the connector cable by pulling the actual cable.
- Do not drop the AC adapter or subject it to strong impacts.
- Do not use the AC adapter in very hot and humid locations.
- Do not plug in the AC adapter while you are using the battery. Switch the camera OFF first.
- The AC adapter is for indoor use only.
- Use only the specified AC adapter. Do not use other AC adapters.
- The AC adapter may sometimes become warm during use. This is normal and not a malfunction.
- Buzzing or whirring noises may come from inside the camera. This is normal and not a malfunction.
- Do not use the AC adapter near a radio as it could interfere with radio signal reception.
- If you remove the battery or AC adapter while the camera is in operation, the date may be lost from the memory. If this happens, reset the date.

Specifications

AC Adapter (PDR-AC20)

Input:	100 to 240V AC, 50/60Hz
Output:	5V DC 3A
Operating temperature:	0°C to +40°C
Storage temperature:	-20°C to +65°C
Maximum Outer Dimensions:	40 x 30.5 x 94.2mm (W x H x D)
Weight:	Approx, 150g
Cord Length:	Approx, 1.5m
Accessories:	Instruction Manual AC cord



- Use the power supply indicated on the supplied AC cord. When using power supply other than the displayed voltage in other countries/region, please purchase the AC cord that applies to the standard of the country/region.
- The AC adapter can be used with 100V to 240V.

Notes on SD card



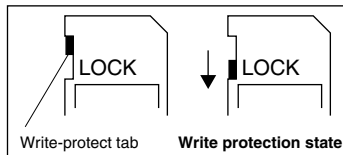
In this camera, the SD memory card is used for the storage medium. In this instruction manual, the SD memory card is called “SD card”. Pay attention to the following notes on handling the supplied SD card.

Cautions

- SD card includes a non-volatile semiconductor memory (NAND Flash EEPROM). Under normal use data stored on SD cards cannot be destroyed (lost). If used improperly, however, the data may be destroyed (lost). Please note that Toshiba will accept no responsibility whatsoever for destroyed (lost) data, regardless of the type or cause of the problem or damage.
- SD card uses part of the memory as the system area based on the SD card, so the actually usable memory capacity is lower than the indicated capacity.
- SD card is already formatted and can be used as such. If you should want to reformat a card in order to delete images or folders, however, be sure to do so on the camera. Formatting the SD memory card on other devices (PC, etc...) may result in problems such as inability to read or write data, reduce the speed of writing, etc...
- It is recommended that you make backups of important data.

Write Protection

To prevent valuable data from being erased, switch the write protect tab at the side of the card to “LOCK”. Data can no longer be overwritten (Lock status). To write, edit or erase data from the SD card, release the write-protection state.



Specifications

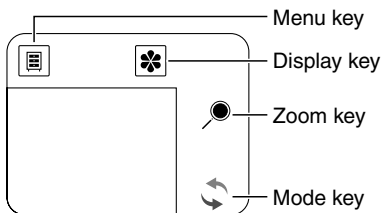
Type of memory:	NAND Flash memory
Temperature for operation:	0°C to +55°C
Temperature for storage:	-20°C to 65°C
Operating/Storage humidity:	30% to 80%RH
	Even within the above range, do not expose to sudden temperature change which may cause condensation
Dimensions:	24.0 x 32.0 x 2.1mm (W x D x H)
Weight:	Approx. 2g

Notes on Touch Panel

In this camera, all input operations other than operations of the POWER switch and shutter button are performed on the touch panel.

The use of a touch panel improve operability, and also results in a neater design thanks to the absence of buttons.

In this camera, special functions are assigned to four key icons. Read the referred pages below carefully for a description of the different functions.



• The touch panel can be operated with the finger, but the use of the stylus pen will reduce the number of operational mistakes.



• Do not press the touch panel with force or operate the touch panel with fingernails or hard pointed objects. Doing so may damage the touch panel.
• You may see crossed lines on the touch panel, this is not a malfunction.

[] Menu key (⇨ P. 32, 38, 46)

Displays the Recording menu, Play menu and Setup menu.

Recording menu: Color, ISO sensitivity, Exposure compensation, White balance, Image quality, Preview, LCD monitor brightness.

Play menu: LCD monitor Brightness, DPOF, Display switch, Slide show, Protect.

Setup menu: Reset, Language, Auto Play mode, Date and time, Sound, Touch sensor, Auto power off, Version information, Format.

[] Display key (⇨ P. 25, 34)

Switches the characters and icons on the screen to display/not to display. Also, the settings below can be activated when the icon is displayed.

During photography mode: Scene mode, Flash, Self-timer

During play mode: Thumbnail display, Erase images

[] Zoom key (⇨ P. 31, 37)

Performs the zoom operation.

During photography mode: Digital zoom photography

During play Mode: Zoom play

[] Mode key (⇨ P. 23)

Switches between the photography mode and play mode.

During photography mode: Switches to play mode.

During play mode: Switches to photography mode.

Names of the Parts

Self-timer Lamp

▷ P. 30

Flash

▷ P. 28

Face Plate

▷ P. 17

Lens

Strap attachment

Attach the strap as shown on the illustration.



Battery/SD card cover

Battery ▷ P. 18

SD card ▷ P. 20



Important • Magnet is used on the front side of the camera. Be careful not to place magnetic cards such as credit cards or the like near the front side of camera.

Indicator

Lit red: Loading, termination, recording, reading in progress

Blinking red: Auto focus error, flash charging in progress

Lit green: Auto focus normal lock

Blinking green: Self-timer operating in progress

Shutter button (equipped with touch sensor function)

▷ P. 23, 24

POWER switch

▷ P. 21

Touch panel

▷ P. 15

[] Menu key

[] Display Key

[] Zoom Key

[] Mode Key

DIGITAL terminal

▷ P. 43

DC IN 5V terminal

▷ P. 19

LCD monitor

Replacing the Face Plate

With the camera, the face plate can be replaced as desired. Various types of face plates are available for purchase.

Be careful not to drop the camera when replacing the face plate.

Detaching the Face Plate



- 1 Open the battery/SD card cover.**
Slide the battery/SD card cover ①, and open it ②.
- 2 Remove from the bottom of the face plate.**
- 3 Detach the hook on the top of the face plate from the camera.**

Attaching the Face Plate



- 1 Open the battery/SD card cover.**
- 2 Hook the top of the face plate to the camera.**
- 3 Press the bottom of the face plate onto the camera until a click is heard and the face plate is securely attached.**

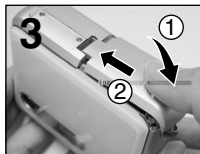
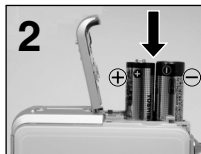
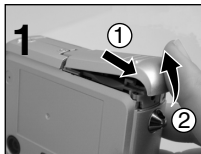
Check that there is no gap between the face plate and the camera.

- 4 Close the battery/SD card cover.**
Close the battery/SD card cover ①, and slide it ②.
Make sure that the battery cover is firmly closed.

This camera uses two size AA batteries. Manganese batteries cannot be used. Before loading the batteries, be sure to read “Notes on Batteries” on page 12.

Loading the Batteries

- When an AC adapter is connected, check that the power is OFF.
- If batteries are loaded when the termination is not operated correctly, the camera may not start up properly. Turn on the power again to resume operation.



Important

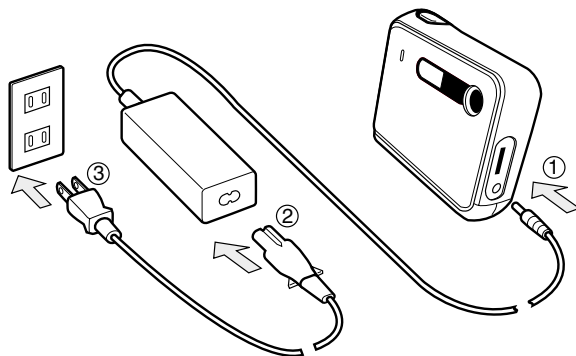


Using the Power Outlet

If you use the AC adapter (sold separately) in a room with a power outlet, you can take photographs for an extended period of time. This also prevents unsuccessful photography or failed transfer of data to a PC due to battery wear. For details on handling the AC adapter, be sure to read page 13.

Important

- Before you connect or disconnect the AC adapter, be sure to turn the camera OFF. If the AC adapter is connected or disconnected with the power ON, it may cause malfunction and damage important data.
- If the AC adapter is used when the termination is not properly operated, the camera may not startup properly. Turn on the power again to resume operation.
- You cannot use this camera to charge the batteries. To charge the batteries such like Nickel Metal Hydride batteries, use the charger sold on the market.

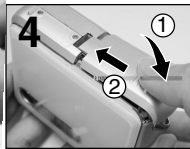


- ① Insert the AC adapter connector plug into the DC IN 5V terminal of the camera.
- ② Connect the AC adapter and the AC cord.
- ③ Insert the AC adapter power plug into the power outlet.

Inserting and Removing the SD card

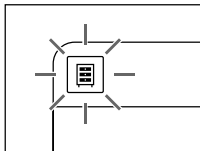
- For details on handling the SD card, be sure to read page 14.
- Before you insert or remove the SD card, be sure to turn the camera off. If the SD card is inserted or removed with the power ON, it may cause malfunction and damage important data.
- This camera is incompatible with the MultiMediaCard™.

Inserting




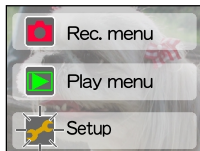
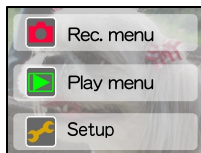
Setting the Date and Time

When you use the camera for the first time or if you have left the camera without the batteries loaded, set the date and time.




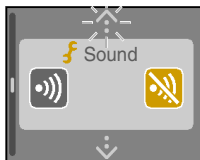
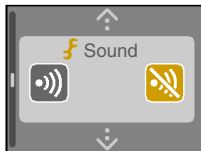
1 Touch the menu key [].

Menu icon is displayed.
To exit from the menu, touch the menu key [].

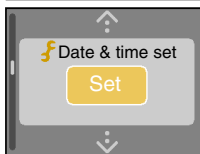
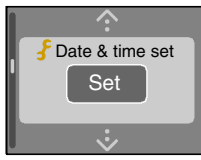


2 Touch the setup [] icon.

Setup menu is displayed.
To exit from the setup menu, touch the menu key [].



3 Touch the icon [] or [] to display the date and time setting screen.



4 Touch [Set] at the center of the screen.

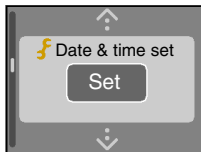


5 Select and touch the item you wish to change, and change with [+] and [-].



6 After changing to the present date and time, touch [OK].

The current date and time are set, and the camera returns to the date and time setting screen.

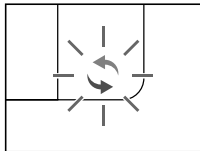


Switching the Mode (Photography Mode <--> Play Mode)

There are two methods of switching between photography mode and play mode.

Using the Mode Key

Whenever the mode key is touched, photography mode and play mode switches.



Using Touch Sensor / Auto Mode Switch Function

This camera is equipped with a touch sensor/auto mode switch function. Here we describe the touch sensor function and auto mode switch function.

• When you touch the shutter button ... (Touch sensor function)

When you touch the shutter button to take a photo during the play mode, the mode automatically switches to the photography mode. This is called the "Touch sensor function". The shutter button senses that a human finger has touched it.

The initial setting is set to OFF.

☞ Touch sensor ⇨ page 47



- When using the touch sensor function, touch the shutter button with your hand. The function may not operate properly if you wear gloves or apply an adhesive plaster to your finger.
- For some people and under certain weather conditions the touch sensor function may not work well.



• When you take a photo ... (Auto mode switch function)

When a preset time elapses after you take a photo and release your finger from the shutter button, the mode switches to the play mode. This is called the auto mode switch function. The time after which the mode switches can be set to anywhere between 2 and 30 seconds. The initial setting is set to OFF.

☞ Auto Play mode ⇨ page 46

Set the "Touch sensor function" and "Auto mode switch" function according to your preference.



- If you leave the camera for a period of time with the power turned off, the setting of the touch sensor function and Auto Play mode function may return to (OFF). In this case, set again.

Taking Photographs

- 1 **Load the batteries and insert the SD card into the camera, and turn the power ON.**

The photography mode is launched.

- 2 **Determine the composition while looking at the LCD monitor.**

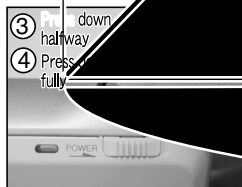
If the monitor is too dark, adjust its brightness.

☞ LCD brightness ⇨ page 33

- 3 **Press the shutter button down half way.**

When the shutter button is half-pressed, auto focus adjustment and auto exposure control are activated. The exposure is a combination of aperture (light quantity adjustment function) and shutter speed.

When the focus and exposure are locked to appropriate values while the shutter button is half-pressed, a high-pitched tone is produced and the indicator lights green. If the focus or exposure could not be set to a proper value, a low-pitched tone is produced and the indicator flashes red. In this case, the focus is locked to infinity (1.5 meters when using the flash) and the exposure is locked to the closest value.



- 4 **From the half-pressed position, press the shutter button further in.**

The photo is taken. During photography, be careful not to let your finger or the strap cover the lens or flash.

If the shutter button is fully pressed at once without pausing at the half-pressed position, the photograph is not taken until the focus and exposure are locked. We recommend using the half-press function so as not to miss photo opportunities.



- The indicator lights red when data is recorded to the SD card. Never open the Battery/SD card cover or remove the battery/SD card while the light is lit. This might damage the SD card or important data in the SD card.
- It may take a few seconds to charge the flash. The indicator blinks red and the monitor turns OFF while the flash charging is in progress. Photography is not possible while the charging is in progress. Wait until the charging is completed.
- The photographed images are recorded with the left and right side extended than the range viewed on the LCD monitor.



- If the auto mode switch is set, and the preset time elapses after you take a photo and release your finger from the shutter button, photography mode automatically switches to play mode. If you wish to continue photography, switch to photography mode.

☞ Switching the Mode (Photography Mode <--> Play Mode) ⇨ page 23

☞ Auto Play mode ⇨ page 46

Taking Photographs (continued)

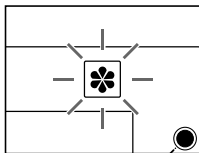
Display the Photograph Information

The photograph information can be displayed to check the camera's status in the photography mode. Also, display the photograph information before changing the scene mode, flash and self timer settings.

- ☞ Setting the Scene Mode ↪ page 26
- ☞ Setting the Flash ↪ page 28
- ☞ Self-timer Photography ↪ page 30


In the photography mode...

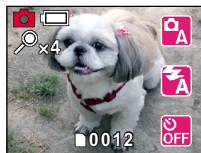
- ☞ Switching the mode ↪ page 23



① Touch the display key [].

The photograph information is displayed.

If you press the display key [] again, photograph information is not displayed.



Recording mode icon

Remaining battery display ↪ P.18

Zoom icon (x2, x4) ↪ P.31

Scene mode icon ↪ P.26

Flash icon ↪ P.28

Self-timer icon ↪ P.30




Possible number of shots



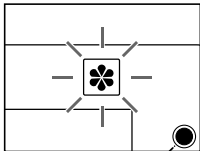
- The LCD monitor sometimes displays bright, dark or colored spots at all times. This is not a malfunction. These spots do not appear in the photographed image.
- The recorded data amount is not fixed due to the difference of the subject, so the possible number of shots displayed may not decrease, or two frames may be decreased after the photography.

Setting the Scene Mode

When the photograph conditions in accordance with the scene mode are selected, the camera makes the optimum settings automatically. The scene mode is initially set to the auto mode [].

In the photography mode...

 Switching the Mode \rightarrow page 23




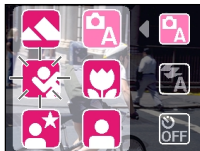
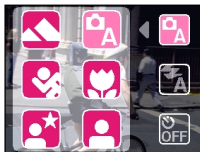
1 Touch the display key []

The photograph information is displayed. With the default setting, the information is displayed, so this operation is unnecessary.



2 Touch the scene mode icon [].

A list of scene mode selection icons are displayed. When the scene mode icon [] is touched again, the displayed list disappears and the original settings are retained.



3 Select the optimum scene mode for the photograph conditions and touch the corresponding icon.

The selected scene mode icon is displayed.



For descriptions of the individual scene modes, see page 27.



- The scene mode settings are not canceled even if the power is turned OFF or the Auto Power OFF function is activated.

Setting the Scene Mode (continued)

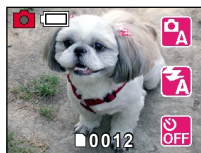
About Scene Mode

The scene mode has the following 6 options.

[] Auto



Default setting. No special setting is necessary.

Available flash: All



[] Macro

Select this option to take photographs in a distance of 20cm to 40cm.

Available flash: [] Suppressed Flash, [] Forced Flash



[] Portrait

Select this option to take photographs of people.

Available flash: [] Auto Red-Eye Reduction,

[] Red-Eye Forced Flash



[] Landscape


Select this option to take photographs of distant scenery or landscapes.

Available flash: [] Suppressed Flash



[] Sports


Select this option to take photographs of fast-moving subjects.

Available flash: [] Suppressed Flash



[] Night


Select this option to take photographs of people against a dusk or night-time background.

Available flash: [] Slow Sync




Setting the Flash

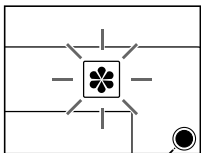
You can take a photo with the flash set.

In the default setting, the flash will be automatically set [] to function in dark places. The flash firing mode can be set to suit the conditions of photography.

The effective firing distance of the flash is approximately 0.4m to 2.0m.

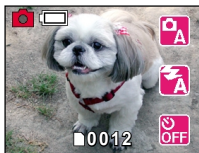
In the photography mode...

 Switching the Mode \supset page 23




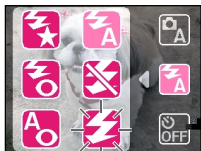
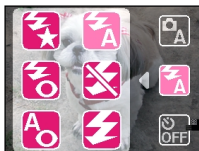
① Touch the display key []

The photograph information is displayed. With the default setting, the information is displayed, so this operation is unnecessary.



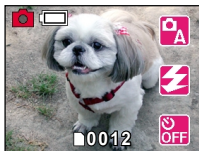
② Touch the flash icon [].

A list of flash selection icons are displayed. When the flash icon [] is touched again, the displayed list disappears and the original settings are retained.



③ Select the optimum flash for the photograph conditions and touch the corresponding icon.

The selected flash icon is displayed.





For descriptions of each flash setting, see page 29.



- It may take a few seconds to charge the flash. The indicator blinks red and the monitor turns OFF while the flash charging is in progress. Photography by using the flash is not possible while the charging is in progress. Wait until the charging is completed.



- If you take a photo in the Slow Sync [] mode at a place with a dark background or in the Suppressed Flash [] mode at a dark place, the shutter speed slows down. To prevent shaking or movement, we recommend that you place the camera on a stable surface.
- The flash settings are not canceled even if the power is turned OFF or the Auto Power OFF function is activated.

Setting the Flash (continued)

About Flash

The flash has the following 6 options.

[] Auto

A default setting. The flash fires automatically according to the photography conditions.

[] Suppressed Flash

The flash does not fire. Use the Suppressed Flash mode when you are taking pictures in indoor lighting at distances too great for the flash to have any effect, such as theater performances or indoor sporting events.

[] Forced Flash

In this mode, the flash always fires. Use the Forced Flash mode when the subject is backlit, or in artificial light (fluorescent lighting, etc.).

[] Slow Sync

The flash is fired at a slower shutter speed.

This flash mode is effective when taking pictures so that not only the subject but also the background are both clearly reproduced in artificial light (backlighting, fluorescent lighting, etc.) or with people against the night as a background scene.

[] Red-Eye Forced Flash

"Red-eye" (when the eyes of people in photographs are red) happens when people are photographed in dark places using a flash, and is caused by the light of the flash reflecting the eyes. When the Red-Eye Force Flash mode is set, the flash always fires. Red-eye is reduced more effectively. Red-eye reduction is most effective when the people being photographed are looking into the camera, and when you photograph from as close as possible.

[] Auto Red-Eye Reduction

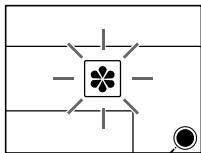
The flash is emitted automatically according to the conditions and red-eye is reduced.

Self-timer Photography

When the self-timer is used, the camera automatically takes a picture after 10 or 2 seconds. (Possible to change according to the set time)

In the photography mode...

Switching the Mode \rightarrow page 23




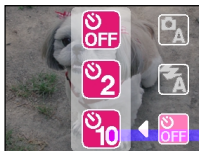
1 Touch the display key [].

The photograph information is displayed. With the default setting, the information is displayed, so this operation is unnecessary.



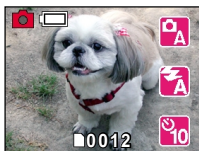
2 Touch the self-timer icon [].

A list of self-timer selection icons are displayed. When the self-timer icon [] is touched again, the displayed list disappears and the original settings are retained.




3 Select the optimum self-timer for the photograph conditions and touch the corresponding icon.

The selected flash icon is displayed.



For descriptions of each self-timer settings, see the following.

[] : Self-timer is set to OFF. (Default)

[] : Takes a photo after 2 seconds.

[] : Takes a photo after 10 seconds.



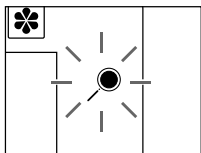
- The self-timer settings are canceled if a photograph is taken with the self-timer, the power is turned OFF or the Auto Power OFF function is activated.

Digital Zoom Photography

This function enlarges the center of the screen and takes photographs in the digital zoom mode with an increased focal distance. The picture quality decreases when the focal distance of the digital zoom increases.

In the photography mode...


Switching the Mode → page 23

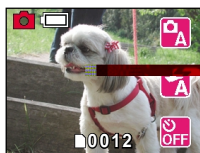


① Touch the zoom key [].

A [x2] icon is displayed on the LCD monitor and the center of the screen is enlarged to twice the original size.



When you press the zoom key [], the following screens are displayed in order of 2 times --> 4 times --> no zoom on the LCD monitor.



- The digital zoom is canceled if the power is turned OFF or the Auto Power OFF function is activated.

Changing the Preset Conditions of Recording menu

Getting Ready

Basic Photography

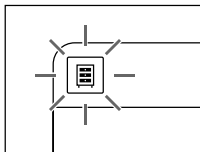
Playing/
Erasing Images

Connecting to
the PC


Other
Applications

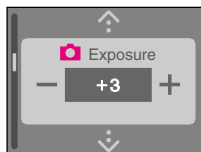
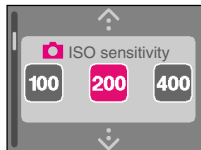
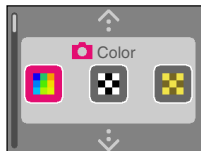
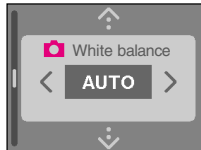
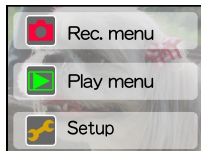
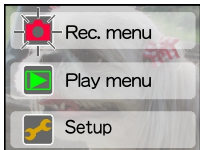
Additional
Information

Establish the photography settings. Color, ISO sensitivity, exposure compensation and white balance returns to its default setting when the power is turned off or the Auto power off function is activated.



① Touch the menu key [].

The menu icons are displayed.
To exit from the menu, touch the menu key [].



Exposure

In this camera, the exposure (a combination of the aperture and shutter speed) is determined automatically and the brightness of the image is adjusted accordingly. If there are extremely bright or dark parts in the frame, the desired subject may be too dark or too light in the resulting photo.

The exposure compensation function adjusts for this.

Touch [+] or [-] to increase or decrease the compensation value in steps of 1. The maximum compensation value is +3, the minimum is -3. The default setting is 0. The types of subject for effective function and the effective setting values are as shown below.

Changing the Preset Conditions of Recording menu (continued)

Positive (+) Compensation

- Copying of printed text (black characters on white paper)
- Backlit portraits
- Very bright scenes (such as snowfields) and highly reflective subjects
- Shots made up predominantly of sky







Negative (-) Compensation

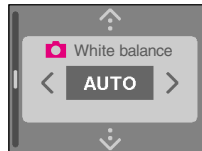
- Spotlight subjects, particularly against dark backgrounds
- Copying of printed text (white characters on black paper)
- Scenes with low reflectivity, such as shots of green or dark foliage

White balance

The human eye adapts to changes in light so that white objects still appear white even when the light changes. With cameras, however, the color balance must be adjusted according to the colors of the light surrounding the subject. This color adjustment is called the “white balance adjustment”. This setting allows you to set the white balance when taking photographs under specific lighting conditions.




Select and set the appropriate white balance using [<] and [>].

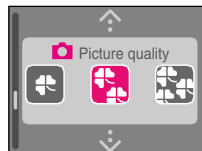
- [] : Automatic adjustment. (Default)
- [] : Photography outdoors in sunny day.
- [] : Photography in cool white fluorescent light.
- [] : Photography in standard fluorescent light.
- [] : Photography in incandescent light.
- [] : Photography out doors in cloudy weather.



Picture quality



Set the quality of picture.

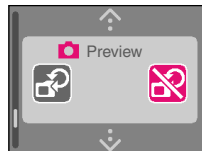
- [] : High quality Photographs are taken with high quality (1600 X 1200).
- [] : Standard Photographs are taken with normal quality (1600 X 1200). (Default)
- [] : Economy Photographs are taken with normal quality (800 X 600).



Preview




Set the preview display to ON/OFF after a photograph is taken.

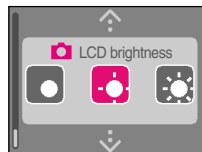
- [] : Sets the preview display to ON (Default)
- [] : Sets the preview display to OFF



LCD brightness

Set the brightness of the LCD monitor.

- [] : The brightness of the LCD monitor is set somewhat on the dark side.
- [] : The LCD monitor is set to the normal brightness. (Default)
- [] : The brightness of the LCD monitor is set somewhat on the light side.




Playing

- 1 **Load the batteries and insert the SD card into the camera, and turn the power ON.**



The photography mode is launched.

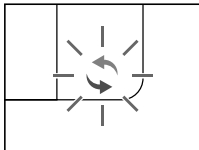
- 2 **Switch to play mode.**

Touch the mode key [].

☞ Switching the Mode \rightarrow page 23

The last recorded image appears.

You can play the previous/next image one frame at a time with [] and [].



Display the Play Information

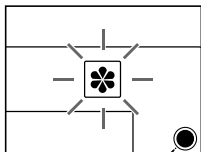
The play information screen displays details on the image. In addition, a list of images (thumbnails) can be displayed, images can be erased after displaying the play information.

☞ Displaying a List of Images (Thumbnail Display) \rightarrow page 35


☞ Erasing Images \rightarrow page 36

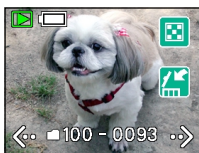
In the play mode...

☞ Switching the mode \rightarrow page 23



- 1 **Touch the display key [].**

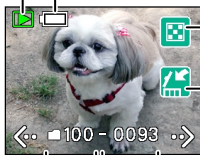
The play information is displayed. If you press the display key [] again, the play information will not be displayed.



Play mode icon

Remaining battery display

\rightarrow P. 18



Thumbnail icon

\rightarrow P. 35



Erase icon

\rightarrow P. 36

Folder No.

Frame No.



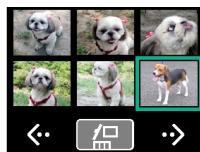
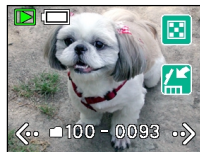
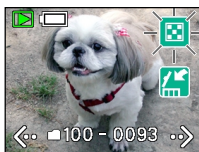
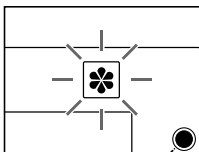
- Touching [] at the last image displays the first image, and touching [] at the first image displays the last image.
- If the play information is not displayed, the previous and next image can be displayed by touching the right-end and the left-end of the image.

Displaying a List of Images (Thumbnail Display)

Six images are shown on one screen. This is called the thumbnail display. Use the thumbnail display to find the desired images quickly from many images.

In the play mode...

 Switching the Mode \rightarrow page 23

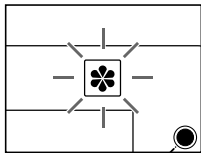


Erasing Images

You can erase the photographed images.

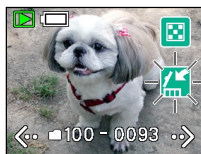
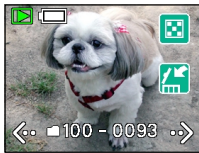
In the play mode...

Switching the Mode \rightarrow page 23




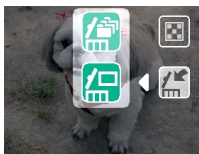
1 Touch the display key [].

The play information screen is displayed. With the default setting, the information is displayed, so this operation is unnecessary.




2 Touch the erase icon [].



A list of erase icons are displayed. When the erase icon [] is touched again, the displayed list disappears.



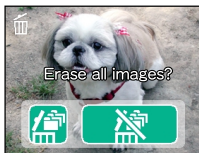
[] : Erasing all images

Erases all the images and folders. When the icon is touched “Erase all images?” is displayed at the center of the screen.

To erase images, touch [].



To cancel the erasure, touch []. To display the reconfirmation screen, touch [].

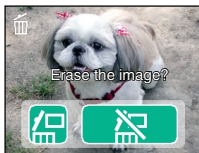
Touch the “Yes” if you wish to erase the image/folder or the “No” if not.



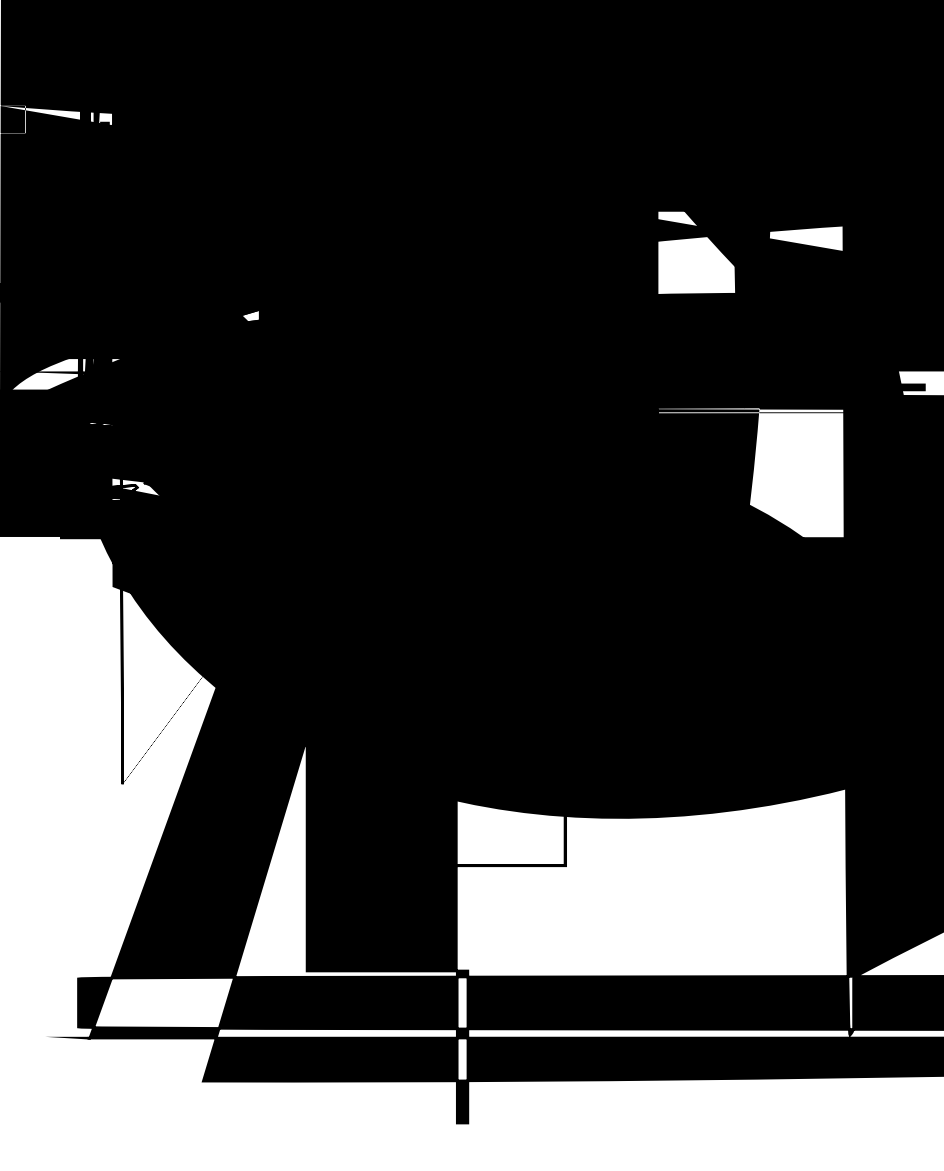
[] : Erasing one image

Erases the currently displayed image. When the icon is touched, “Erase image?” is displayed at the center of the screen.

To erase the image, touch []. To cancel the erasure, touch [].



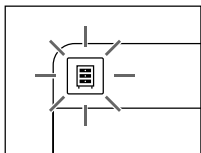
- Protected images (prevents images from being erased accidentally) cannot be erased.
 - Protect \rightarrow page 39
- Images cannot be erased when the write-protect tab of the SD card is set to [LOCK].
 - Notes on SD card \rightarrow page 14




Changing Settings of Play Menu

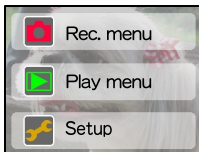
Getting Ready

Establish the Play settings. Settings other than the slide show are not canceled even when the power is turned off or the Auto power off is activated. The slide show is canceled when to power is turned OFF.

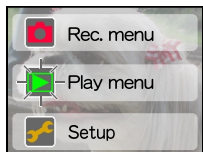


① Touch the menu key []


The menu icon is displayed.
To exit from the menu, touch the menu key [].

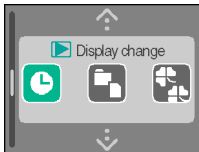


Basic Photography





② Touch the play menu icon []

Play menu is displayed.
To exit from the play menu, touch the menu key [].






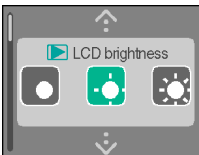
Playing/
Erasing Images

Touch [] or [] to scroll through the items and to display one at a time.
The items on the play menu are as follows:

LCD brightness

Set the brightness of the LCD monitor.

- [] : The brightness of the LCD monitor is set somewhat on the dark side.
- [] : The LCD monitor is set to the normal brightness. (Default)
- [] : The brightness of the LCD monitor is set somewhat on the light side.



Connecting to
the PC

Other
Applications

DPOF (Digital Print Order Format)

“DPOF” is a standard for directly writing print information to the SD cards and other media. For details on DPOF, see page 40.

Setting DPOF \rightarrow page 40



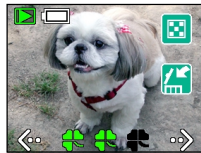
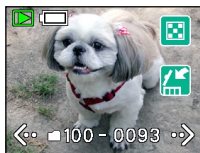
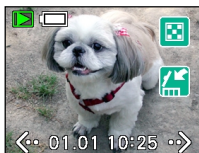
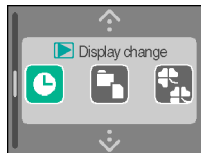
Additional
Information

Changing Settings of Play Menu (continued)

Display Change

You can switch the information displayed at the bottom of the play menu.

- [🕒] : Displays the date and time of the photograph taken.
- [📁] : Displays the number of folder and file. (Default)
- [📷] : Displays the image quality.



Slide show

Use this function to display the images in the SD card in order.

- [3] : The images are displayed in order at 3-second intervals.
- [10] : The images are displayed in order at 10-second intervals.

The slide show is canceled if the touch panel is touched during the slide show.

The auto power off function does not work during the slide show.

🔊 Auto power off ⇨ page 47



Protect

Use this function to protect images against accidental erasure.

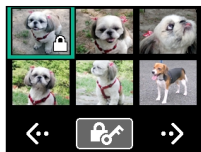
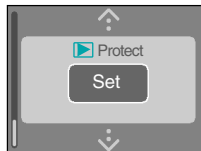
Touch the [Set] icon at the center of the screen, the setting screen is displayed.

Select the image and touch [🔒] to protect the image.

The protect icon [🔒] is displayed on the screen when the image is protected. Take note that protected images will be erased after formatting the SD card.

To release the protect, select the protected image and touch [🔓].

🔊 Formatting the SD card ⇨ page 48



Setting DPOF (Digital Print Order Format)

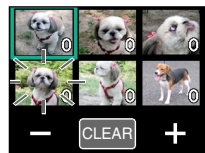
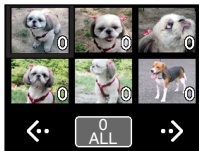
DPOF (Digital Print Order Format)

"DPOF" is a standard for recording information for printing directly on SD cards and other media. Files compatible with the DPOF format can easily be printed on printers compatible with the DPOF format or laboratory printing services.

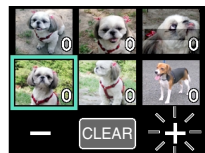


1 Touch the [Set] icon at the center of the screen.

The images in the SD card will be displayed as thumbnails. The number of prints are displayed in each image.



2 Select by touching the image.



3 Decide the number of prints with - and +.



When no image is selected, the total number of images to print and [ALL] is displayed at the bottom of the screen. Touch [ALL] to select all the images.

When image is selected, [CLEAR] is displayed at the bottom of the screen.

Touch [CLEAR] to set the number of prints for the selected image to 0.

When one image is selected, touch the selected image again to deselect it.

Once the number of prints is specified for all the images you wish to print, touch the menu key [] and return to the play menu.



- The number of prints for each image can be set in the range of 0 to 99. However, the total number of prints is limited to 999.
- This camera conforms with the PRINT Image Matching. PRINT Image Matching stand for the use of the assorted compatible printer, with a system that simply actualizes a clear print.

Connecting PC

To install the software contained in the supplied CD-ROM, your personal computer must conform to the system requirements in the table below. Check the following items before you install the software.

Minimum System Requirements

	Windows	Macintosh
CPU	Pentium higher processor	Power PC G3 processor 266MHz or higher
OS	Windows 98/2000/Me/XP Pre-installed PC	Mac OS 9.0 or higher
Memory	64MB or higher	
Free space on hard disk	20MB or higher	
Color monitor	256 or more colors (800 X 600 dot min, 32,000 or more colors recommended)	
Device	CD-ROM drive/USB port standard equipment	

File Structure

Images are stored in the “XXXTOSHI” folders shown at the right. (The illustration on the right is an example.)

(“XXX” is a number from 100 to 999.)

The files are given the names “PDR_XXXX.jpg”.

(“XXXX” is a number from 0001 to 9999.)

The extension “.jpg” indicates that the file is in JPEG format.

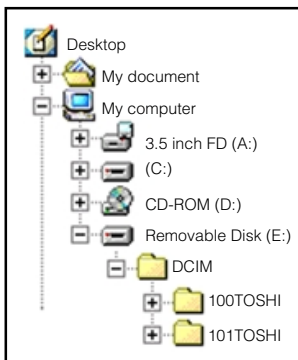
“JPEG” is a file format for storing color images in compressed form. The compression rate can be selected. The higher the compression rate, the greater the reduction in image quality. On this camera, the compression rate is determined by the image quality setting.

JPEG is a file format commonly used for computer image programs and on the Internet.

Images taken on the camera are stored in Exif format.

“Exif” is the abbreviation of “Exchangeable Image File Format”, a color still image format for digital still

cameras approved by the JEITA (Japan Electronics and Information Technology Industries Association). Exif consists of JPEG data and also includes thumbnail image and shooting mode settings. The Exif format is compatible with TIFF (another image format) and JPEG formats, and can be used with ordinary computer image processing programs.



Installing the Image Viewing Software

Install the “Image Expert” software into your personal computer to view images.

<For Windows>

Applicable OS : Windows 98/2000/Me/XP

- 1 **Insert the supplied CD-ROM into the CD-ROM drive.**

Display language selection screen appears.

- 2 **Click “English”.**

- 3 **Click “Install Image Expert”.**

Follow the on-screen instructions and install Image Expert.

<For Macintosh>

Applicable OS : Mac OS 9.0 or higher

- 1 **Insert the supplied CD-ROM into the CD-ROM drive.**

Installing the USB driver

The USB driver must be installed when connecting the supplied USB cable to the personal computer for the first time. Pay attention to the direction of the terminal when connecting the USB cable.

<For Windows>

Applicable OS : Windows98/2000/Me/XP.

Install the USB driver contained in the supplied CD-ROM for windows 98. Install the standard driver of each OS for windows 2000/Me/XP.

<For Windows 98>

① Insert the supplied CD-ROM into the CD-ROM drive.

Display language selection screen appears 



Transferring the Camera's Images to the Computer

Launch the image viewing software “Image Expert” and transfer the camera's images to the computer.



- The data may be damaged if the camera's power is terminated while image data is being transferred. We recommend the use of the AC adapter (sold separately) when connecting the camera to the PC.
- The auto power Off does not operate when the camera is connected to the PC.
- When removing the USB cable or the SD card from the camera after data is transferred, be sure to remove in accordance with the OS you are using.

<For Windows>

If Image Expert and the USB driver are not yet installed, first install them.

- ☞ Installing the Image Viewing Software ⇨ page 42
- ☞ Installing the USB driver ⇨ page 43

① **Connect the computer and camera with the USB cable.**

When the USB cable is connected with both the computer and camera started up, the computer automatically detects the camera. Pay attention to the direction of the terminal when connecting the USB cable.

② **Launch Image Expert.**

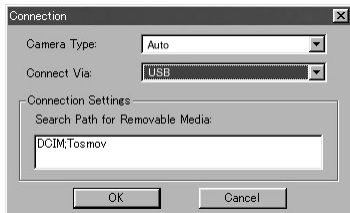
Click [Start] - [Programs] - [Image Expert] on the Windows task bar.

③ **Click “Camera” in the menu bar then click “Connection”.**

④ **Select “Connect Via” to “USB” and click “OK”.**

⑤ **Click [] on the tool bar.**

In the “Select Album” screen, either select an album, or enter a new album name and click Open, all images are downloaded to the selected album.



- Refer to the help file for details on Image Expert.

Transferring the Camera's Images to the Computer (continued)

<For Macintosh>

If Image Expert is not yet installed, first install it.

☞ Installing the Image Viewing Software ⇨ page 42

① **Connect the computer and camera with the USB cable**

When the USB cable is connected with both the computer and camera started up, the computer automatically detects the camera. Pay attention to the direction of the terminal when connecting the USB cable.

② **Launch Image Expert.**

Open the "Image Expert" folder, and double click "Image Expert" icon.

③ **Click "Camera" on the menu bar, then click "Connection".**

④ **Select "Connect Via" to "USB" and click "OK".**

- The SD card in the camera may not be mounted on the desktop if another USB device is being used at the same time. In this case, connect with only the camera.

⑤ **Click "Camera" on the menu bar, then click "View image".**

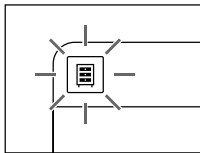
⑥ **Click the images you wish to install into the personal computer while pressing the [OPTION] key.**

⑦ **Click [].**


In the "Select Album" screen, either select an album, or enter a new album name and click Open, all images are downloaded to the selected album.

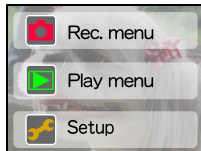
Changing the Basic Settings of the Camera

Getting Ready

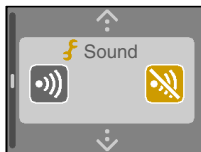
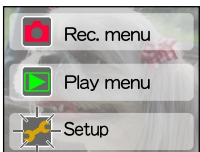


① Touch the menu key [].



Menu icon is displayed.
To exit from the menu, touch the menu key [].



Basic Photography



Playing/
Erasing Images

Touch [] or [] to scroll through the items and to display one at a time.
The items on the setup menu are as follows:

Connecting to
the PC

Reset

Set whether or not to return the settings to their original factory settings, except for the language and date & time setting.

LANGUAGE

Set the display language for menus displayed on the LCD monitor.

Select the language with [<] or [>].

Other
Applications

Auto Play mode

If the preset time elapses after you take a photo and release your finger from the shutter button, the mode switches to play mode. This is called the "Auto Mode Switch function".

Set the switch over duration for the play mode. You can set the time within 2 to 30 seconds, or set it to OFF (Default).

Set the time with [<] or [>] according to your preference.

Additional
Information

Change the Basic Settings of the Camera (continued)


Date & time set


Set the time and date.

For Date & Time , see “Setting the date and time” on page 22.

Sound

When you touch the key or icon, set the operating sound to ON/OFF


[] : Sounds the beep tone. (Default)

[] : Does not sound the beep tone.

Touch sensor


When you touch the shutter button to take a photograph during the play mode, the mode automatically switches to the photography mode. This is called the “Touch sensor function”.


[] : Touch sensor is set to ON


[] : Touch sensor is set to OFF (Default)

Auto power off

If no operation is carried out for a fixed period of time, the power is automatically turned OFF to prevent battery wear. This is called Auto power off. To return to the operating state, slide the POWER switch.

[] : If no operation is carried out for 1 minute, Auto power off is activated. (Default)

[] : If no operation is carried out for 2 minute, Auto power off is activated.

[] : If no operation is carried out for 3 minute, Auto power off is activated.

Version info.

Display the version of firmware.


“Firmware” refers to the software that controls the camera’s operation. The firmware is pre-installed in the camera.

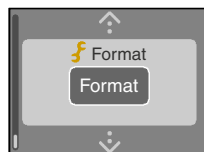
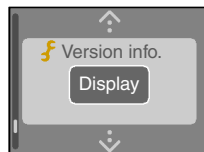
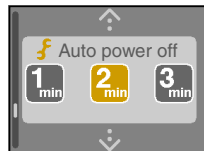
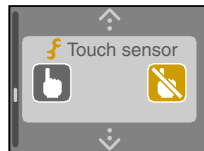
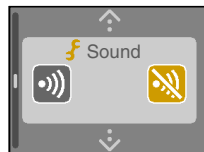
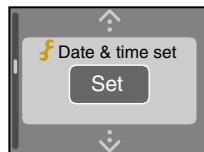
When the touch panel is touched while the version information is displayed, the screen returns to the setup menu.

Format

Format (Initialize) the SD card.

For details on Format, see page 48.

 Formatting the SD card  page 48



Getting Ready

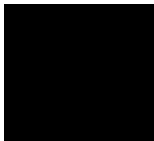
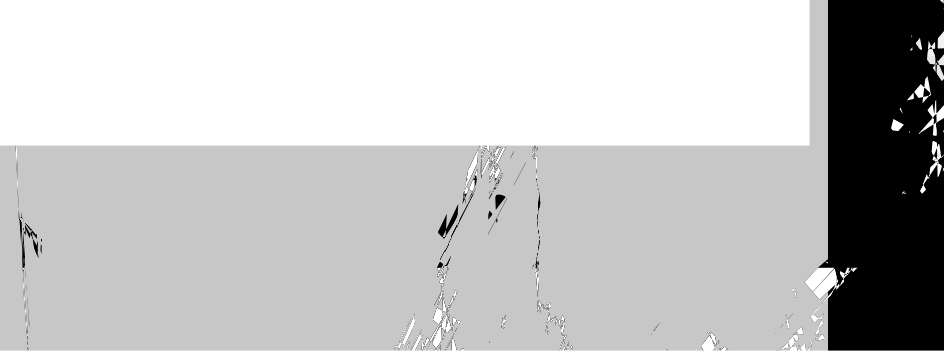
Basic
Photography

Playing/
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











Connecting to
the PC

Other
Applications




Additional
Information



Specifications

Model name	PDR-T10
Pickup elements	1/2.7"  sensor (total number of pixels: approx. 2.01million)
Sensitivity	Equivalent to ISO 100/200/400
Lens	Single focus lens F3.1/F8
Focal length	f=5.96mm (equivalent to 38mm on a 35mm camera)
Auto-focus	TTL system. AF, focus adjusting range: approxi. 20cm to infinity Detection system:  contrast detection system.
Metering system	TTL metering by Pickup system
Exposure control system	Program Automatic exposure (Exposure compensation possible)
Shutter speed	1 to 1/500sec.
White balance	Auto/switch possible (outdoor (clear), cool white fluorescent light, standard fluorescent light, incandescent light, outdoor (cloudy))
Focal range	Standard: Approx. 40cm to infinity. Macro: Approx. 20cm to infinity
Self-Timer	2 seconds/10 seconds selectable
Flash	Auto/Auto Red-eye Reduction/Red-eye Forced Flash/Forced Flash/Suppressed Flash/Slow Sync Flash Adjusting Method/ Automatic Adjustment Effective range: Approx. 0.4m to 2.0m
Date/Time	Simultaneously recorded to image data (Exif file format)
Automatic calendar function	Automatically adjusted until the year 2037
 monitor	1.6" low-temperature polysilicon TFT (61,380 pixels)
I/O terminal	DIN 5V terminal: D5 V, DIGITAL terminal: USB cable connections (Ver. 1.1, conforms to Mass Storage class).
Power supply	2 x AA (Nickel, Nickel Metal Hydride, Lithium) battery or  R-V3 Lithium battery pack or A adapter (sold separately) (PDR-A 20)
Recording medium	SD Memory card 8/16/32/64/128/256MB compatible
 mpressing system	JPEG-compliant
Image file format	Exif ver.2.1-compliant
 nversion rules	D  ver.1.0-compliant
Operating conditions	Operating temperature: +5°  (+41°F) to +40°  (+104°F), Storage temperature: -20°  (-4°F) to +60°  (+140°F), Humidity: 30 to 80% no condensation
 amera dimensions	85.5 mm (W) x 72 mm (H) x 27.9 mm (D) (excluding protrusions)
Weight	Approx. 120g (excluding accessories, battery and SD card)

Number of frames

QUALITY MODE	8MB	16MB	32MB	64MB	128MB	256MB
 High quality	6	14	30	62	126	253
 Standard	12	28	59	122	248	495
 Economy	51	106	224	460	931	1854

The recorded data amount is not fixed due to the subject, so the number of frames does not necessarily follow the table.

Getting Ready

Basic
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Additional
Information

Separately Sold Accessories

The A Adapter and the face plate are available as separately sold accessories. The use of the separately sold accessories will increase your convenience and enjoyment when using the camera. Take a look at our website or the catalog when purchasing the separately sold accessories.

AC adapter

PDR-A 20

This can be used with the household electric outlet.

Before use, please read “Notes on the A Adapter” (▷ page 13), “Using the Power Outlet” (▷ page 19).

For further details, see the instruction manual of the A Adapter.

Face plate

PDR-KFP 1 (4 face plates)

PDR-KFP 2 (4 face plates)

For the method of replacing the face plate, please refer to “Replacing the Face Plate”. (▷ page 17)

For the color pattern or type of the face plate, confirm at website.

✉ **Global Contacts** ▷ page 56.

Warning Messages

The following warning messages are displayed on the LCD monitor.

<During Photography mode>

Message	Meaning
	Batteries power is below half.
	Battery power is nearing exhaustion.
	Batteries are completely exhausted.
No card	No SD card is inserted.
Card full	No more space in the SD card. Recording is not possible.
Card error	The SD card format is incorrect. The SD card is damaged.
Card protected	The SD card is locked. Recording is not possible.
Card unformatted	The SD card is not formatted (Initialized). (Switches to the format execution screen.)
Full	Folder No. and file has reached its maximum value.
Folder error	Folder with the same number exists.
The date and time setting is not completed.	The date and time is not set or the setting is canceled.
Unsupported card	The MultiMedia Card™ is inserted.

<During Play Mode>

Message	Meaning
	Batteries power is below half.
	Battery power is nearing exhaustion.
	Batteries are completely exhausted.
No card	No SD card is inserted.
Card full	No more space in the SD card. Recording is not possible.
Card error	The SD card format is incorrect. The SD card is damaged.
Card unformatted	The SD card is not formatted (Initialized). (Switches to the format execution screen.)
Unsupported Image	Playing back an image shot with another device other than this camera.
Folder error	Folder with the same number exists.
No image	There is no image in SD card.
Image protected	Trying to erase an image that is protected.
Card protected	SD card is locked.
DPOF error	DPOF information is abnormal.

The following are some frequently asked questions.

Q: When I press the shutter button, the picture is not taken immediately. Why is this?

- A: Are you using the “half-shutter” function (half-pressing the shutter button)? With the camera, the focus and exposure are adjusted when the shutter button is half-pressed. If you press the shutter button all the way in without half-pressing first, the camera first adjusts the focus and exposure and the photo is only taken once the focus and exposure have been adjusted properly, resulting in a time lag between the time when the shutter button is pressed and when the photo is actually taken.

We recommend using the “half-shutter” function so as not to miss photo opportunities. For instructions on using the “half-shutter” function, see “Taking photographs” on page 24.

Q: I can't focus properly. What could the problem be?

- A: The camera uses a precise auto focus mechanism, but under the conditions and with the subjects described below the auto focus function may not work well.
- Subjects moving at high speed
 - Very shiny subjects such as a mirror or car body
 - Extremely low contrast subjects (such as subjects dressed in the same color as the background, etc.)
 - When there are objects in front of or behind the subject (such as an animal in a cage or a person in front of a tree)
 - Subjects with little reflection, such as hair or fur
 - Subjects with no solidity, such as smoke or flames
 - Subjects viewed through glass

In addition, the focus is set on the center of the frame, so if the subject is not at the center (when shooting two people standing side by side, for example), the focus is adjusted on the background and the desired subject (the two people) may be out of focus. In such cases, do the following:

- 1) Point the camera so that one of the persons is at the center of the viewfinder.
- 2) Half-press the shutter button. (The focus is locked on the person.)
- 3) Holding the shutter button in the half-pressed position, reposition the camera to achieve the desired composition.
- 4) Take the photo.

If the focus cannot be adjusted, it is locked to infinity (1.5 meters when using the flash).

Q&A (continued)

Q: I want to send a photo as an e-mail attachment. How can I reduce its size?

- A: When sending photos as e-mail attachments, the image (file) size should not be too large. Use the included image viewing program called Image Expert to save photos in reduced size. For instructions on installing Image Expert, see "Installing the image viewing program" on page 42.
- 1) Launch Image Expert.
 - 2) Choose "Open Image" from the "File" menu.
 - 3) Specify the image you want to reduce, then click "Open".
If the camera is connected using the USB cable, it is displayed as a removable disc. Images on the camera can be opened directly by specifying the removable disc.
 - 4) Click on "Change Size" in the "Image" menu.
 - 5) Input values at "Width" and "Height", then click "OK". If "Keep Aspect Ratio" is checked, the size is changed without changing the image's vertical:horizontal ratio.
 - 6) The image is displayed at its new size.
 - 7) Click on "Save As" in the "File" menu to save the image with the new size.

Q: I am having trouble retouching the image. What is the problem?

- A: You have likely had the experience of taking a photo and seeing afterwards that it is brighter or darker than you expected or does not have the desired colors. With digital still cameras you can retouch the photos after taking them, but this is often difficult at first. Image Expert, the included image viewing program, includes an auto retouch function that makes it easy to retouch photos.
- 1) Launch Image Expert.
 - 2) Open the image you want to retouch.
 - 3) Click on "Auto Retouch" in the "Image" menu.
 - 4) Save the retouched image.

Troubleshooting

First check the warning displayed on the LCD monitor (▷ page 51) and the Indicator (▷ page 16). Then check the following items.

Problem	Causes	Remedy	See page
No power supply	The batteries are exhausted.	Replace with new batteries.	18
	The AC adapter plug is disconnected from the power outlet.	Plug the adapter back in.	19
No power supply during operation.	Manganese batteries are used.	Use the recommended batteries.	12
	The batteries are exhausted.	Replace with new batteries.	18
The battery runs out quickly.	Alkaline batteries are used.	Use the recommended batteries.	12
	You are using the camera in extremely cold conditions.	Put the battery in your pocket or another warm place to heat it and then load it into the camera just before you take a picture.	12
	The terminals are dirty.	Wipe the battery terminals with a clean, dry cloth.	—
	The batteries are exhausted.	Replace with new batteries.	18
No photograph is taken when the shutter button is pressed.	No SD card is inserted.	Insert an SD card.	20
	Not enough space in the SD card.	Insert a new SD card. Erase photographed images or change the size and quality to increase space on the SD card.	20 36
	The SD card is write-protected.	Remove the write-protection or replace with a new SD card.	14 20
	The SD card is not formatted.	Format the SD card.	48
	The SD card is damaged.	Insert a new SD card.	20
	The Auto Power OFF function is activated.	Turn the power on again.	47

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Troubleshooting (continued)

Problem	Causes	Remedy	See page
I cannot use the flash to take pictures.	The flash is set to Suppressed Flash mode.	Set the flash other than suppressed Flash mode.	28
	You pressed the shutter button while the flash was charging.	Wait until charging is completed before pressing the shutter button.	28
I cannot set the flash.	The scene mode is set.	The scene mode is set to auto or the like.	26
The play image is too dark even though I used the flash.	The subject is too far away.	Move closer to the subject.	28
The play image is blurred.	The lens is not clean.	Clean the lens.	11
	The image is out of focus.	Set the Macro photography according to the distance up to the subject.	27
I cannot format the SD card.	The SD card is write-protected.	Remove the write-protection.	14
I cannot erase one picture.	The frame is protected.	Remove the write-protection. Cancel the DPOF setting.	39
	The SD card is write-protected	Remove the write-protection.	14
The set date and time disappears.	Left the camera with the batteries removed.	Load the batteries and set the data and time.	22

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